AMENDMENT TO THE SPECIFICATION

Please replace the paragraph appearing on page 5, line 12 to page 5, line 21 with the following amended paragraph:

In one embodiment of the present invention, the encoding algorithm parses a given binary sequence of ~~uncoder~~uncoded user data $\underline{b}$ into smaller length sub-blocks of length n, where n is an arbitrary but fixed integer. For example, if $\underline{b} = b_1 b_2 b_3 \ldots$ is the binary string of user data, then the first n-bit block is $\underline{b}_{n1} = b_1 b_2 b_3 \ldots b_n$, the second n-bit block is $\underline{b}_{n2} = b_{n+1} b_{n+2} \ldots b_{2n}$, the third n-bit block is $\underline{b}_{n3} = b_{2n+1} b_{2n+2} \ldots b_{3n}$, etc. The encoding algorithm then encodes the n-bit sub-blocks into (n + 1)-bit code words and concatenates the (n + 1)-bit code words to form an encoded string $\underline{c}$ for the uncoded binary sequence $\underline{b}$ such that the absolute running digital sum (RDS) of $\underline{c}$ (n +1). Since the encoding algorithm encodes n-bit sub-blocks into (n + 1)-bit code words, the encoder has a code rate of n/(n +1) for a given positive integer n.

Please replace the paragraph appearing on page 8, line 17 to page 8, line 25 with the following amended paragraph:

In an alternative embodiment, one or more parity bits can be added to each code word. The addition of one parity bit, in the worst case, could increase the absolute value of the running digital sum of the encoded sequence at the end of the code word to (n+2). In a run-length-limited (RLL) code, the number of consecutive zero's is constrained to a value no greater than a maximum number "k". With the above encoding algorithm, the worst-case k-constraint will be no more than (n+2). An encoded sequence having the maximum number of consecutive ~~zero's~~ zeros equal to the worst-case k-constraint could occur if the incoming user data stream includes a repetition of n-bit word and

its complement in tandem.